

REMARKS

Claims 1-32 are pending in the application. Reconsideration of the objected and rejected claims in view of the following remarks is respectfully requested.

Summary of the Official Action

In the Office action, the Examiner objected to claim 5 as allegedly containing an informality. Additionally, claims 5-32 were rejected as being indefinite for, among other things, allegedly omitting essential elements. Finally, claims 5-32 were indicated to contain allowable subject matter and would be allowed if amended to overcome the Section 112, 2nd paragraph, rejection. By the present remarks, Applicant submits that the objections and rejections have been overcome, and respectfully requests reconsideration of the outstanding Office Action and allowance of the present application.

Telephone Interview of September 15, 2010

On September 15, 2010, Applicant discuss via telephone the possibility of conducting a formal Interview with the Examiner. It was noted that only a claim objection and an indefiniteness rejection remain and that Applicant was willing to discuss a resolution to these formal matters so that the application can advance to allowance.

The Examiner noted that because Applicant was under final rejection, an interview would be granted if Applicant was willing to formally present claim amendments that overcome the objections and rejections. Applicant's representative explained that no substantive amendments were intended or believed to be needed, but that Applicant would entertain any minor amendments suggested by the Examiner with the aim of obtaining allowance.

Although the Examiner implied that more than minor amendments would be needed to overcome the formal objection and rejection, Applicant again respectfully requests that the Examiner reconsider her position on the formal objection and rejection (in light of the arguments presented herein) and contact Applicant's representative by telephone to discuss allowance of the instant application.

Objection to the Claims is Moot and/or Traversed

Claim 5 was objected to for allegedly containing informalities. Applicant respectfully disagrees with this basis of objection.

Claim 5 recites the feature "an electromagnet" in reference to how the movable plate functions as an armature of an electromagnet. An electromagnet core is already recited separately in claim 5. Respectfully, Applicant is not required under current USPTO rules to change the claim as suggested by the Examiner.

The Examiner also objects to the last "wherein" clause of claim 5 suggesting that this language be deleted and replaced with language from another claim. Respectfully, Applicant submits that there is no legal basis for this requirement. To the extent that the Examiner believes that alternative limitations (which are recited in the last "wherein" clause) are somehow improper, the Examiner's attention is directed to page 5 of the attached non-precedential Board Decision *Ex parte HARDING* which, although in the context of indefiniteness, disagreed that alternative limitations were *per se* improper.

The Examiner's remaining bases of objection are relevant to the extent that Applicant adopts the Examiner's suggested changes, which Applicant has not adopted.

Accordingly, Applicant respectfully requests that the above-noted objection be withdrawn.

The Section 112, 2nd paragraph, Rejection, is Improper

Claim 5-32 were rejected as allegedly being indefinite for reciting the last “wherein” clause in claim 5, for being incomplete for omitting essential elements pursuant to MPEP 2172.01, and because claim 26 is unclear in regards to the term “moving back”.

With regard to the last “wherein” clause in claim 5, it is again noted that alternative limitations (which are recited in the last “wherein” clause) are not *per se* improper. The Examiner’s attention is again directed to page 5 of the attached non-precedential Board decision *Ex parte HARDING* which specifically noted that alternative limitations were not *per se* indefinite.

With regard to indefiniteness based on MPEP 2172.01, Applicant again submits (see Applicant’s previous Response) that Applicant is not required under section 112, second paragraph, to limit the invention to any particular cooperative relationship between the recited structural features. Applicant respectfully submits the Examiner has misunderstood MPEP 2172.01, which indicates that when it is indicated “by applicant” in the specification that certain features are essential to the invention, such features must be recited in the claims. The Examiner has identified no features which were indicated “by Applicant” to be essential to the invention in the specification and which are not recited in the claims. In fact, Applicant has not asserted in the specification that certain devices are critical or essential to the invention. Certainly, none of the elements noted by the Examiner have been so described, and the Examiner has respectfully failed to point to any portion of the specification which supports the Examiner’s position that

such devices are asserted to be critical. Accordingly, the Examiner's reliance on MPEP 2172.01 is respectfully misplaced and this rejection is believed to be improper and should be withdrawn.

Applicant also directs the Examiner's attention to page 8 of the attached non-precedential Board decision *Ex parte ROTHENBERG et al.* which supports Applicant's reading of MPEP 2172.01.

Furthermore, the Examiner has again set forth no legal basis for requiring Applicant to limit the invention in the suggested manner. Section 112, 2nd paragraph, does not require Applicant to specify the relationship between all of the parts of the lock shown in Fig. 1. Applicant submits that the requirement that the claims be interpreted in light of the specification provides sufficient basis for the claims being definite. The Examiner is reminded that Applicant is entitled to the broadest reasonable interpretation permitted by the prior art, and that one of ordinary skill in the art, having read the specification, would understand that which is claimed.

With regard to the definiteness of claim 26, Applicant submits that the requirement that the claims be read in light of the specification and drawings support Applicant's position that the claims are definite. The language indicating that the retractable sliding bolt can move back away from a protruding position is clearly shown in Figs. 1 and 3 - with Fig. 1 showing the protruding position of bolt 3 and Fig. 3 showing a position of the bolt 3 after it moves back away from the position of Fig. 1. Respectfully, using the electromagnet core 6 (which magnetically attracts plate 4 when energized) to maintain the position of Fig. 1 and prevent the bolt 3 from moving back to the position shown in Fig. 3 would be readily apparent to one of ordinary skill in the art from a fair reading of Figs. 1 and 3 and the relevant description thereof in the specification.

Accordingly, Applicant requests that the Examiner reconsider and withdraw the rejection of these claims.

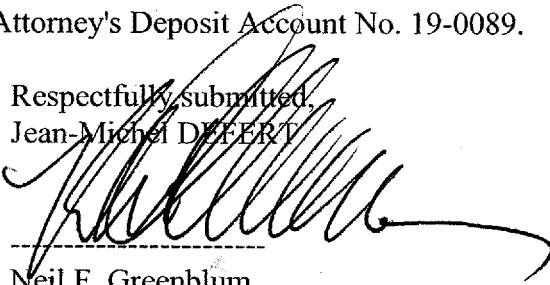
Allowable Subject Matter

Applicant acknowledges that claims 5-32 have been indicated to contain allowable subject matter and would be allowed or allowable if amended to overcome the Section 112, 2nd paragraph, rejection as necessary. As Applicant has demonstrated that the Section 112, 2nd paragraph, is improper, Applicant submits that these claims should be indicated to be allowed. Furthermore, as Applicant has addressed the claim objection and no other objections or rejections remain, it is submitted that all of the claims are in condition for allowance and should be allowed.

CONCLUSION

In view of the foregoing amendments and remarks, Applicant submits that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Applicant hereby makes a written conditional petition for extension of time, if required. Please charge any deficiencies in fees and credit any overpayment to Attorney's Deposit Account No. 19-0089.

Respectfully submitted,
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The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WILLIAM V. HARDING

Appeal No. 2004-0267
Application 09/847,224¹

ON BRIEF

Before JERRY SMITH, BARRETT, and DIXON, Administrative Patent Judges.

BARRETT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134(a) from the final rejection of claims 1-75.

We reverse.

¹ Application for patent filed May 2, 2001, entitled "Autonomous Mission Profile Planning."

BACKGROUND

The invention relates to a method and apparatus for planning a mission profile to locate a target. The method uses target information to calculate a search pattern, such as the serpentine pattern shown in Fig. 4B.

Claim 1 is reproduced below.

1. A method for planning a mission profile in real time, comprising:

ascertaining a plurality of target information, including a target location, a target velocity, and a target location error; and

autonomously² determining a pattern from the ascertained target information.

The examiner relies on the following references:

Reedy	5,631,653	May 20, 1997
Saban	6,043,867	March 28, 2000

Claims 1-75 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as his invention.

Claims 1-75 stand rejected under 35 U.S.C. § 102(b) as being anticipated by either Saban or Reedy.

We refer to the final rejection (Paper No. 8) (pages referred to as "FR__") and the examiner's answer (Paper No. 12)

² "The term 'autonomous,' as used herein, means under programmed control without human intervention." Specification, page 7, lines 17-18. See also brief, pages 3 and 4.

(pages referred to as "EA__") for a statement of the examiner's rejection, and to the brief (Paper No. 11) (pages referred to as "Br__") for a statement of appellant's arguments thereagainst.

OPINION

35 U.S.C. § 112, second paragraph

The examiner considers the phrase "determining a pattern" in all of the independent claims to be vague and indefinite since it is not clear what pattern is being determined (FR2). The examiner asks the question (FR2): "What is forming the pattern and what type of pattern is being formed?"

Appellant argues that it is readily apparent in the context of the art and in light of the specification that the "pattern" is a "search pattern," referring to the specification at page 8, lines 17-20; page 11, lines 15-23; page 12, lines 7-12; Figs. 4B and 5 and their associated text (Br7). It is noted that these arguments were previously made but not addressed by the examiner in the final rejection (Br7).

The term "pattern" is broad, but "[b]readth is not indefiniteness," In re Gardner, 427 F.2d 786, 788, 166 USPQ 138, 140 (CCPA 1970). We do not consider the word "pattern" to be indefinite. The specification discloses that the "pattern" refers to the "pattern for the submunitions 120 to use in searching for and locating the target 110" (page 8, line 8), i.e., a search pattern. As to the examiner's question about

"[w]hat is forming the pattern" (FR2), we note that a method claim, such as claim 1, does not need to describe the structure for performing the method step; the apparatus claims, such as claim 65, recite a computing device. Accordingly, the rejection of claims 1-75 on this ground is reversed. Nevertheless, "pattern" is not interpreted to be limited to a "search pattern" for the purposes of defining over the prior art. Before the application is granted, there is no reason to read into the claim the limitations of the specification. See In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). We only conclude that the term "pattern" is not indefinite.

The examiner considers claims 2, 19, and 51 to be indefinite since they claim "assuming a value" yet are dependent from claims in which that value is "ascertained." The examiner states (FR2): "Ascertained or ascertaining implies determining a fact, not making an assumption. Therefore, the claims are contradictory."

"Ascertain" is defined as "to find out or learn with certainty." Webster's New Collegiate Dictionary (G.&C. Merriam Co. 1977). "Assume" is defined as "to take as granted or true : SUPPOSE." Id. We construe "assuming" to be one form of "ascertaining." Accordingly, the rejection of claims 2, 19, and 51 on this ground is reversed.

The examiner considers claims 6, 23, 59, 67, and 69 to be alternative and indefinite (FR2).³

There is nothing inherently indefinite about the use of alternative expressions: the claims can be met by any one of the alternative limitations. The examiner has not pointed to any other language in the claims that would be indefinite. The rejection of claims 6, 23, 59, 67, and 69 on the grounds of alternative language is reversed.

35 U.S.C. § 102(b)

Appellant argues that Saban and Reedy each fail to teach "autonomously determining a pattern," and that the examiner has failed to identify any teaching of this limitation (Br10).

The examiner states (EA4):

These references have been applied as art which shows all claimed elements, when the claims are read in view of the very broad and indefinite claim language noted above. The heart of the invention, as claimed, is "autonomously determining a pattern from the ascertained target information" and since the language allows no precise determination of what pattern is being determined, the prior art is believed to read over the language of the claims.

In the final rejection, the examiner refers to Saban, column 12, lines 10-45, and column 4, line 40 to column 8, line 60 (FR2).

³ It is noted alternative language also appears in claims 3, 7, 9, 26, 40, 43, 53, 56, which have not been rejected.

The examiner does not explain the correspondence between the claim limitations and the references, especially as to what is considered the "target location error" and the "pattern" and how the references anticipate the limitation of "autonomously determining a pattern from the ascertained target information [including the target location error]." The examiner does not provide his own definition of pattern. Although representative claim 1 is very broad, we do not find all the limitations taught by either Reedy or Saban.

Reedy discloses a maneuver detection method for use in target trackers in weapon guidance systems (abstract). Reedy detects a maneuver, for example, a turn. However, a maneuver is a random event by a target and we fail to see how maneuver detection can be considered a "pattern." Moreover, Reedy uses position (range, bearing) and velocity (range-rate) for maneuver detection (col. 4, lines 40-44) and the examiner does not point out where Reedy teaches "ascertaining ... a target location error." Thus, Reedy does not disclose "ascertaining ... a target location error" and "autonomously determining a pattern [using a target location error]." The rejection of claims 1-75 over Reedy is reversed.

Saban discloses an interceptor fitted with a target tracker that uses laser range finder (LRF) even under low signal to noise conditions to enhance the likelihood of detecting a target soon

enough that the interceptor can be steered to the target (e.g., col. 2, lines 27-43). Saban calculates target range and velocity (e.g., Fig. 5, block 61) but the examiner does not point out where Saban teaches "ascertaining ... a target location error." The only "pattern" mentioned is a "pattern recognition (PR) analyzer" for detecting reflections that were scattered from a target (col. 7, lines 40-67). The examiner does not explain how recognizing a pattern from target reflections and noise in Saban meets the claim limitation of "autonomously determining a pattern [using a target location error]." Thus, the rejection of claims 1-75 over Saban is reversed.

CONCLUSION

The rejections of claims 1-75 are reversed.

REVERSED

JERRY SMITH)
Administrative Patent Judge)
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LEE E. BARRETT)
Administrative Patent Judge)
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JOSEPH L. DIXON)
Administrative Patent Judge)

BOARD OF PATENT
APPEALS
AND
INTERFERENCES

Appeal No. 2004-0267
Application 09/847,224

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The opinion in support of the decision being entered today was **not** written
for publication and is **not** binding precedent of the Board.

Paper No. 27

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SIMON J. ROTHENBERG, HSU CHI YEH
and BERNARD J. GREENSPAN

Appeal No. 2002-0747
Application No. 09/006,982

ON BRIEF

Before ABRAMS, FRANKFORT, and NASE, Administrative Patent Judges.
ABRAMS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-27,
which are all of the claims pending in this application.

We REVERSE.

BACKGROUND

The appellants' invention relates to an apparatus for delivering air-borne substances. An understanding of the invention can be derived from a reading of exemplary claim 1, which has been reproduced below.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Watt	4,554,916	Nov. 26, 1985
Spengler	4,781,146	Nov. 1, 1988

The following are the standing rejections:

- (1) Claims 1-18¹ under 35 U.S.C. § 101 on the basis that the invention is inoperative and therefore lacks utility.
- (2) Claims 1-18 under 35 U.S.C. § 112, first paragraph, on the basis that the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make or use the invention commensurate in scope with these claims.
- (3) Claims 1-27 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the appellants regard as the invention.
- (4) Claims 1-27 under 35 U.S.C. § 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements.
- (5) Claims 1, 2 and 8-18 under 35 U.S.C. § 103(a) as being unpatentable over Watt.

¹ The claims to which this rejection applies were not recited in the statement of the rejection. It would appear, however, that it applies to claims 1-18, inasmuch as these are the only claims that contain subject matter with which the examiner takes issue.

(6) Claims 3-7 under 35 U.S.C. § 103(a) as being unpatentable over Watt in view of Spengler.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the Answer (Paper No. 20) for the examiner's complete reasoning in support of the rejections, and to the Brief (Paper No. 19) and Reply Brief (Paper No. 21) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

Claim 1

An apparatus for delivering air-borne substances, comprising:
 a structure comprising a chamber, wherein said chamber defines an axis of air flow;
 an air flow device at a first end of said chamber for introducing air and flowing air substantially along said axis;
 a plurality of pulsatile delivery devices positioned at said first end of said chamber such that the actuation of said devices emits an air-borne substance substantially along said axis; and
 an actuator in communication with said delivery devices for selective actuation thereof;
 wherein:
 said pulsatile delivery devices are positioned within a plurality of cassettes; or
 said axis of air flow is substantially perpendicular to the forces of gravity and said apparatus can be rotated about said axis of air flow.

(1)

The examiner has rejected claims 1-18 on the basis that the disclosed invention is inoperative and therefore fails to comply with 35 U.S.C. § 101² (Answer, page 4):

The examiner fails to see how all the elements of the apparatus can **rotate about** . . . this axis and still be operative, [sic] won't the hose connecting the air flow device to the inlet port be torn off and wrap around the outside of the cylindrical sleeve which defines this chamber? How does [sic] the actuator & pulsatile devices rotate about this axis? Since they are part of the apparatus they also rotate? Yes or no?

In the course of arriving at this conclusion, the examiner takes the position that the phrase "can be rotated about," which appears in independent claim 18, must be interpreted to mean that the apparatus "is going completely around the axis and not partially as set forth in . . . the specification." The appellant counters by arguing that neither the common definition of "rotated" nor this terminology as used in the specification require that the apparatus rotate completely around the axis (Brief, page 7). We agree with the appellant that the definition of "rotated" does not require that the apparatus rotate completely around the axis, but only that it rotate through an arc about the axis. In this regard, we note on page 8 of the specification the explanation that the chamber need rotate only through an arc of 180 degrees about the axis of air flow, which in our view would have indicated to one of ordinary skill in the art that the

² 35 U.S.C. § 101 Inventions patentable. Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

apparatus is operable without complete rotation of the chamber about the axis of air flow. Moreover, the examiner has not provided evidentiary support for the allegation that the invention is inoperable.

It therefore is clear to us that even if one considers that a rejection under 35 U.S.C. § 101 is proper when an invention is inoperable, in the present case the evidence does not support a finding of inoperativeness, and this rejection of claims 1-18 cannot be sustained.

(2)

Claims 1-18 stand rejected under 35 U.S.C. § 112, first paragraph, "because the specification, while being enabling for a chamber which partially rotates, it [sic] does not reasonably provide for an entire apparatus that **rotates about** . . . an axis" (Answer, page 4). For the reasons explained above, it is our view that claim 1 does not require that the chamber be rotatable completely around the axis of air flow, and therefore enablement of the claimed invention is provided by the specification. The examiner's own words, quoted above, support this conclusion.

The rejection of claims 1-18 under 35 U.S.C. § 112, first paragraph, is not sustained.

(3)

In this rejection, claims 1-27 are considered by the examiner to be indefinite³ under the second paragraph of Section 112 for four reasons. The first of these is that the statement in claim 1 that "said axis of air flow is substantially perpendicular to the forces of gravity" is indefinite "since the Earth is subject to the forces of gravity of many nearby heavenly bodies and it is not stipulated as to which force it is or could be perpendicular too [sic], e.g. the Sun (Sol), [sic] the Moon or maybe the Earth's own?" (Answer, page 5). The question here is whether one of ordinary skill in the art would understand the phrase in issue to refer to anything other than the earth's gravity, and without any hesitation we answer it in the negative. We do not agree with the examiner that this language renders the claims indefinite.

The second issue raised by the examiner is that there is "insufficient antecedent basis" in claim 1 for the limitation "the forces of gravity" (Answer, page 5). Again, it is our view that one of ordinary skill in the art would understand what is meant by this language, even absent prior definition in the claim, and therefore its presence does not cause the claim to be indefinite.

The examiner also expresses the view (Answer, page 5) that there is "insufficient antecedent basis" for the limitation "the cross-sectional area" in claim 16, which renders

³ The second paragraph of 35 U.S.C. § 112 requires claims to set out and circumscribe a particular area with a reasonable degree of precision and particularity. *In re Johnson*, 558 F.2d 1008, 1015, 194 USPQ 187, 193 (CCPA 1977). In making this determination, the definiteness of the language employed in the claims must be analyzed, not in a vacuum, but always in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art. *Id.*

claim 16 indefinite. Claim 14, from which claim 16 depends, adds to claim 1 a reducing adapter in fluid communication with the chamber at a second end thereof. Claim 16 states that the chamber has an inner diameter, and that "said reducing adapter effects approximately 2 to 40 fold reduction in the cross-sectional area of air flow with respect to said chamber inner diameter." The effect of the reducing adapter is explained in the specification as effecting "an approximately 2 to 40 fold diameter reduction with respect to the chamber's inner diameter" (emphasis added), which is reflected in original claim 16. While there appears to be an inconsistency between the manner in which the effect of the reducing adaptor is recited in claim 16, that is, the comparison between the cross-sectional area of the air flow and the inner diameter of the chamber, it is our view that one of ordinary skill in the art would have appreciated that the intent of this feature of the invention is to have the reducing adaptor reduce the airflow by 2 to 40 fold from that flowing through the unaltered portion of the chamber, whether expressed in relative cross-sectional areas or diameters. Therefore, we are of the view that this matter does not cause claim 16 to be indefinite.⁴

Without amplifying explanation, the examiner further concludes that "in light of the above 35 U.S.C. §§ 101 & 112(1) rejections the claims [presumably claims 1-18] are indefinite" (Answer, page 5). We do not agree that the mere presence of the other

⁴ However, consideration should be given to using either "cross-sectional area" or "diameter" as the factor upon which the reduction in flow is based.

rejections establishes a prima facie rejection of indefiniteness, which apparently is the examiner's position.

On the basis of the reasons expressed in the foregoing paragraphs, this rejection under the second paragraph of Section 112 is not sustained.

(4)

In a second rejection under the second paragraph of Section 112, claims 1-17 are rejected as being indefinite on the basis that they are "incomplete for omitting essential elements, such omission amounting to a gap between elements." Here, the examiner refers to Section 2172.01 of the MPEP and sets forth as the single omitted element "[a] user/recipient respiratory interface in order to facilitate delivery of gases" to a user (Answer, pages 5 and 6). The referenced section of the MPEP states that a rejection under the second paragraph of Section 112 is proper when a claim "fails to interrelate essential elements of the invention as defined by applicant(s) in the specification." The appellants have argued that the elements set out by the examiner were not defined in their specification as essential elements of the invention, and on that basis this rejection is improper. We agree, and further note that in our view one of ordinary skill in the art⁵ would have possessed sufficient skill to understand from the

⁵ Skill is presumed on the part of the artisan, rather than the lack thereof. In re Sovish, 769 F.2d 738, 743, 226 USPQ 771, 774 (Fed. Cir. 1985).

explanation of the invention how to deliver gases from a mixing chamber such as that disclosed and claimed in this application to a user/recipient respiratory interface.

This rejection is not sustained.

(5)

Claims 1, 2 and 8-18 have been rejected as being unpatentable⁶ over Watt. It is the examiner's position that Watt discloses all of the subject matter recited in independent claim 1 except that "Watt only disclose [sic] the use of a single cassette and not a plurality of cassettes and discloses the air flow device & pulsatile devices at a mid point of the chamber & not an end" (Answer, page 6). The examiner notes, however, "that appellant's [sic] specification does not set forth this specific co-location of air source & pulsatile devices at an end of the apparatus, as unexpectedly providing any new result or unexpectedly solving any new problem in the art over the prior art," and from this concludes "[a]ccordingly, the examiner considers the selection of such to be a mere obvious matter of design choice and does not patentably distinguish the claims over the prior art, barring a convincing showing to the contrary," and

⁶ The test for obviousness is what the combined teachings of the prior art would have suggested to one of ordinary skill in the art. See, for example, In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In establishing a prima facie case of obviousness, it is incumbent upon the examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Int. 1985). To this end, the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the appellant's disclosure. See, for example, Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1052, 5 USPQ2d 1434, 1439 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988).

"[f]urthermore the co-location of an air source and pulsatile device at one end of a delivery device is old and well known in the art and one of ordinary skill in the art would consider such to be more of a matter of mere obvious routine design choice rather than it constituting a patentably distinct inventive step, barring a convincing showing of evidence to the contrary" (Answer, page 7). The appellants argue in rebuttal that the examiner has provided no evidence to support the conclusions set forth above, and thus the rejection should not stand.

Watt discloses a rotary proportioning inhalator comprising a somewhat cone-shaped cylindrical body having an outer element 38, an inner element 39, and a face adaptor 47. Several pressurized therapeutic gases are supplied to the inhalator through a plurality of individual inlets 36 which are located at about the midpoint along the length of the device. The mixing of the pressurized gases is controlled by demand valves located at each inlet, and the mixture is communicated to the user by means of the face adaptor. There is no teaching of introducing a stream of air in addition to the gases, or that the Watt device is rotatable in use.

By the examiner's admission, Watt fails to disclose or teach at least two elements recited in the claim, namely, positioning the delivery devices at a first end of the chamber, and positioning the delivery devices within a plurality of cassettes. Contrary to the statement of the examiner, the appellants have explained in detail how and why the specified locations of the air source and the pulsatile delivery devices are

important to their invention and solves problems present in the art (specification, pages 2-12). On the other hand, the examiner has not adduced any evidence in support of his assertions that the claimed "co-location" of the air source and the delivery devices and the use of a plurality of cassettes are "old and well known in the art," and that positioning the delivery devices in a plurality of cassettes is merely a duplication of known parts for a known purpose.

The mere fact that the prior art structure could be modified does not make such a modification obvious unless the prior art suggests the desirability of doing so. See In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). In the present situation, we fail to perceive any teaching, suggestion or incentive which would have led one of ordinary skill in the art to modify the Watt device in such a manner as to meet the terms of claim 1. Watt fails to establish a prima facie case of obviousness with regard to the subject matter recited in claim 1. This being the case, we will not sustain the rejection of claim 1 or, it follows, of claims 2 and 8-18, which depend from claim 1.

Claims 3-7 stand rejected as being unpatentable over Watt in view of Spengler, which was cited for its disclosure of "several representative ranges which may be used to assist in determine [sic] proper length & diameter which encompass those set forth in the claims" (Answer, page 10). The examiner goes on to opine that one of ordinary skill in the art would therefore have had the "suggestion/motivation" to "optimize the [Watt] device with these known dimensions in the art in order to produce a more efficient &

effective device" (Answer, page 11). There is absolutely no support in evidence or logic for this theory. Moreover, be that as it may, the teachings of Spengler do not alleviate the problems pointed out above with regard to Watt, and we will not sustain this rejection of claims 3-7.

CONCLUSION

None of the other rejections are sustained.

The decision of the examiner is reversed.

NEAL E. ABRAMS
Administrative Patent Judge

CHARLES E. FRANKFORT
Administrative Patent Judge

JEFFREY V. NASE
Administrative Patent Judge

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